

JOB DESCRIPTION FOR PROFESSIONAL POSTS

The following job description should be completed in duplicate and forwarded through your Departmental Administrative Officer to the Division of Personnel when (1) a classification review of an existing post is proposed, (2) a new post is established requiring classification and recruitment action, or (3) the duties of a post have changed significantly. Where there is an incumbent in the post, the description should be completed jointly by the incumbent and immediate supervisor. If the post is vacant, the immediate supervisor should complete the description. Considerable care should be given in completing the job description as it will serve as the primary source of information in evaluating the grade level of the post and in preparing the vacancy notice.

Part I. GENERAL DATA**1. This job description is being submitted for the purpose of:**

- a) Requesting a review of the classification
- b) Issuing a vacancy announcement
- c) Redescribing the duties of an existing post
- ☒ d) Other (please explain): **Cost Free Expert (CFE)**

2. Location of post:

- a) Department **Department of Safeguards**
- b) Division **Division of Technical Support**
- c) Section **Section for Installed Equipment**
- d) Unit

3. Functional title and current grade of post: **CFE – Unattended Monitoring System Engineer, P5**

CCOG code:

4. Present incumbent's name: **J. Halbig**

Former incumbent's name:

If new post, please indicate
date of establishment:**5. Incumbent's supervisor**

- a) Name **M. Aparo**
- b) Functional title **Head, Section for Installed Equipment**
- c) Grade **P5**

6. Date post was last reviewed:

7. List the major changes in the duties of the post which have taken place since the last review. Note that existing posts will not be reviewed for reclassification purposes unless the duties and responsibilities have changed substantially since the current grading of the post was established and appear to be of a lasting nature. For reclassification procedures please refer to AM II/3, paragraphs 31-34.

The scope and the level of responsibilities associated in this area have increased with the growing use of large, complex monitoring systems (e.g. radiation monitoring, process monitoring), and, where required, remote monitoring. The grading for this position is P5, commensurate with the position's level of responsibility and the high level of competence required by the post holder. Specifically, the post-holder will be expected to perform the following:

- Develop and implement the field support infrastructure for unattended systems at IAEA HQ,
 - Provide appropriate techniques and methods for unattended monitoring systems that meet Departmental requirements.
 - Define and implement initial equipment acceptance tests and provide the specifications and requirements for equipment setup, operation and procedures for hardware and software faults at the system and module level.
 - Liaise with developers, contractors, system suppliers and technical staff in the course of development, acceptance and field implementation of safeguards equipment.
 - Update documentation, including operation manuals, maintenance manuals and training manuals.
 - Plan and undertake field implementation activities.
 - Perform and document acceptance testing of incoming systems equipment from manufacturers
 - Set up, test, install, repair, document and modify equipment and software.
 - Review relevant aspects of the performance monitoring program for new and installed systems, and continuously monitor unattended system performance.
 - Work in cooperation with manufacturers to solve technical problems.
 - Provide expert technical guidance to technicians in the setup, testing, installation, commissioning, diagnosis and repair of unattended systems in the field
 - Review and provide technician training in the implementation, operation, maintenance and troubleshooting of unattended systems.
 - Provide technical guidance to inspectors in the field on equipment operation and assist in the resolution of any encountered operational problems
 - Provide expert support on the setup and diagnosis of computer and software related faults in field systems and the associated communications equipment.
 - Take a lead role in the scheduling, procurement, shipping, implementation and inventory control of unattended equipment and associated resources
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8. Please show under this item the organizational structure of the Division. This can be done easily by inserting in the blank boxes the appropriate information. The "organizational" chart should show specifically (a) where the post is located in the hierarchy of the Department, (b) who reports to the post holder, (c) to whom the post holder reports.

Department level:

DDG-SG

Division level:

DIR-SGTS

Section level:

SH-SGTIE

Unit level:

This position

**CFE, Unattended
Monitoring System
Engineer**

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9. If applicable, please list characteristic quantitative data relevant to the post. For example, in the case of an Editor, the number of pages edited may be of relevance for determining time spent on a task.

The CFE post holder will contribute considerable expertise and effort to the planning, specification, testing, logistics, preparation and installation of unattended systems.

10. What are the main purposes (objectives) of the post? (Overall role/functions of the post with stress being placed on the more important aspects.)

The CFE post holder will coordinate the planning, development and implementation of LANL based unattended systems for IAEA safeguards equipment. Working from Departmental needs, he/she will establish near and long-term unattended objectives and will advise in the planning of new systems. The post-holder will ensure that all the required documentation associated with the authorization and implementation of unattended systems is complete and accurate. He/she will also be responsible for the establishment of appropriate technician and inspector training with unattended systems. The post holder will ensure unattended monitoring systems achieve their performance goals and will work in cooperation with manufacturers to solve technical problems. The CFE will be expected to undertake extensive travel to the field.

Part II. JOB DESCRIPTION

Guidelines for Preparation:

This form is intended to obtain information about the job and not about the individual who may occupy the job, although it may be difficult to separate the job from the incumbent. Supervisors should ensure that the form describes the characteristics of the job that needs to be done and not the characteristics of the person doing the job. It is suggested that the description of each major duty begin with an action verb.

READ THROUGH THE ENTIRE FORM BEFORE STARTING TO COMPLETE IT

1. Summarize the major duties and responsibilities of the position in order of importance and indicate in the margin the percentage of time spent on each (most jobs contain no more than 5 or 6 major responsibilities). First state what is being done, then how it is being done.

% of time: Duty/responsibility:

40	Plan, develop and implement unattended monitoring systems for IAEA safeguards equipment
20	Evaluation of safeguards equipment systems and components prior to deployment in the field
10	Develop and implement the field support infrastructure, procedures and documentation for IAEA unattended systems
10	Establish near and long-term integration objectives and advise on the planning of new systems
10	Preparing and undertaking field implementation and carrying out performance monitoring during field-testing.
5	Liaison with States' R & D organisations and commercial equipment developers and manufacturers
5	Provide expert assistance to the operations divisions (incl. the provision of field support during inspections and instruction on the use of instruments, methods and techniques)

2. What are the minimum knowledge requirements of the job? (These need not be equivalent to those of the present incumbent.)

Level and field of study of university degree (or the equivalent acquired through training or self-study)

Computer Engineering/
Electrical Engineering /
Nuclear Engineering
Physical Science

Minimum length and type of practical experience required:

- at national level
- at international level

10 Years

Language(s):

- proficiency required
- other languages preferred

English
German, French, Russian or Spanish

3. Work Role: What does the job require the incumbent to do (i.e. describe the analysis, interpretation, adaptation, innovation, planning, co-ordination, and directing that the job requires)?

The post holder must be able to undertake complex engineering tasks from the conceptual stage, through prototyping, evaluation, field-testing and implementation. He/she must be familiar with IAEA safeguards surveillance and unattended monitoring systems and also must also liaise with operations divisions to determine implementation requirements, assist in the field as necessary and to provide technical support during equipment system testing and implementation. He/she will also write clear and concise technical specifications, test reports and procedures.

4. What subject matter (diversity of work) does the job cover and what is the depth of treatment of the subject matter?

Unattended instrumentation for safeguards monitoring.

5. Describe the control exercised or guidance given by the supervisor in terms of planning, controlling and reviewing the incumbent's work, e.g. how often do you meet, how are priorities handled, how is work achieved, how are instructions given.

Working directly under the Head, Section for Installed Equipment, the post holder will be required to take a leading role in the planning and implementation of unattended safeguards systems. He/she will also work closely with, and provide advice to, the Unit Heads of Unattended Monitoring Systems and Surveillance (for integrated systems) in the areas of unattended monitoring systems. The post-holder will also to participate in the evaluation and testing of equipment.

6. Indicate which regulations, manuals, precedents, policies, or other administrative and technical guidelines apply to the incumbent's work, and to what extent the incumbent is permitted to interpret, deviate from, or establish new guidelines:

SG-TED-01, and in particular SG-TED-14 (ref. <http://sgintranet.iaea.org/>) and Essential User Requirements for Unattended Monitoring Systems.

7. With whom (indicate title only), for what purpose, and how often is the incumbent required to have contacts in the job? (Describe the most typical, not the most unusual, contacts, e.g. to obtain information, to seek funding, to commit the Agency on)

	<u>Person(s) title</u>	<u>Purpose</u>	<u>How often?</u>
Inside the IAEA	SH-SGTIE	Receive general instructions and develop strategic plans. Provide implementation documentation and technical feedback.	Daily
	UH-SGTIE/UMS UH-SGTIE/Surveillance	Work closely with, and provide advice in the areas of unattended	Daily

	(for integrated systems)	monitoring systems.	
Outside the IAEA	SGOA, B & C	Determine needs Assist with user requirements Provide field support Provide training	Daily
	SGTS-TCS	Monitor equipment system performance	Monthly
	SGTS-TTR	Participate in inspector training	2 per year, or as required
	Equipment manufacturers	Oversee the progress of instrumentation manufacture, testing and delivery	Weekly
	Facility operators	Liaison during equipment shipment, field testing, installation, commissioning	10/year

8. Describe the most important type(s) of decisions the incumbent is authorized to take and why these are important:

Taking a lead role in the planning and implementation of new unattended safeguards monitoring systems.

9. Describe the most important types of proposals expected of the incumbent in the job and why these are important:

Based on the needs of operations divisions, propose implementation solutions that will best meet those needs in an efficient and cost-effective manner.

10. Describe the most damaging involuntary error(s) that could be made in the work and the effect(s) that would result:

Badly installed, insufficiently tested or unreliable inspection equipment may undermine seriously the Agency's credibility with States and facility operators and the Agency's performance in carrying out its role in international safeguards.

11. Total staff in organizational units supervised by incumbent. (Note: "supervised" means "held accountable for the work.") This is the only factor that is not applicable to all posts.

Professional and higher level staff
Grade level number

Technical and administrative support staff
Grade level number

This is an accurate and complete description of the details of the job.

Incumbent

Date

Richard A-SH
Immediate
Supervisor

18/10/05
Date

Printed name

Printed Name: **M. Aparo**

[Signature]
Division Director

Date

ABaute-Wiles
Administrative
Officer

05/02/0
Date

Printed name: **N. Khlebnikov**

Printed Name: **A. Baute-Wiles**

(Personnel - JD/P Apr. 1998)